

(57) Abstract: A method and apparatus (200) for modulating I and Q signals to compensate for phase error between the quadrature outputs of a local oscillator (126) of a quadrature modulator(s). The error in the quadrature outputs of the local oscillator is effectively compensated by pre-processing (201) incoming $I(t)$ and $Q(t)$ baseband signals to generate composite signals adding (102) and subtracting (108) scaled (202, 210, 204, 214) $I(t)$ and $Q(t)$. These composite signals form the input (19, 21) of quadrature modulator(s), the method comprising the steps of: applying a first scaling factor to an input I signal; applying a second scaling factor to an input Q signal; adding the scale I and Q signals; subtracting the scale I and Q signals; and quadrature modulating the added and subtracted signals.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.